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RESEARCH AID

LABOR SUPPLY AND EMPLOYMENT
IN NORTH KOREA
1949 AND 1953-58



CIA/RR RA 59-16

November 1959

CENTRAL INTELLIGENCE AGENCY
OFFICE OF RESEARCH AND REPORTS

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FOREWORD

The purpose of this research aid is to provide background information on the population and the labor force of North Korea. Because of the paucity of information on this subject, the estimates in this research aid are first approximations subject to further revision.

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LABOR SUPPLY AND EMPLOYMENT IN NORTH KOREA*
1949 AND 1953-58

I. General

This research aid presents data on labor supply and employment in North Korea in 1949 and 1953-58. Most of the data in Tables 1 through 6** were obtained from the yearbooks for 1957 and 1958 published by the Central News Agency of North Korea and from the semiannual reports of the North Korean State Statistical Bureau. Because most of the original material is presented in the form of index numbers or as percentage changes rather than as absolute numbers, a variety of estimating techniques had to be used to derive the figures. These techniques are described in the footnotes to the tables.

In terms of labor supply and its utilization, only the most general conclusions can be drawn from the data shown in Tables 1 and 2. The estimates of total population and its distribution by age are based on official Japanese data for 1925-44, on estimates of vital rates and migration since 1944, and on estimates of war losses in 1950-53. Although satisfactory estimates of total civilian employment could be made from fragmentary official data and by analogy with Communist China, the distribution of civilian employment by age and sex was not available and could not be estimated reliably. The distribution of workers and staff*** is shown in Table 3, the distribution of employment in state and cooperative industry by sector**** and by type of industry† is shown in Tables 4 and 5, and the distribution of agricultural employment by sector is shown in Table 6. Data on nonagricultural employment either by sector or by branch†† and data on industrial employment by branch are not available.

* The estimates and conclusions in this research aid represent the best judgment of this Office as of 15 October 1959.

** Tables 1 through 6 follow on pp. 3 through 8, below.

*** The term workers and staff is defined in III, below.

**** The term sector is used to designate the category of ownership of an economic activity (state, cooperative, and private).

† The term type of industry is used to designate the category of goods produced (producer goods and consumer goods). These categories also are called heavy industry and light industry, respectively, in North Korean publications.

†† The term branch refers to kind of activity, such as industry or construction.

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The data shown in Tables 2 through 5 are subject to unknown margins of error but are believed to be the best estimates of employment that can be made with the data available. The data for 1949 and 1953-56, shown in Table 3, were derived directly from official sources and are considered to be the most reliable.

The data on employment contained in the tables of this research aid relate only to employed civilians, both the unemployed and the armed forces being excluded. North Korea does not report unemployment.

II. Armed Forces

Although North Korea does not publish data on the strength of its armed forces, the North Korean armed forces apparently represent a relatively large portion of total employment. In 1958, for example, the size of the armed forces was estimated to be 361,000, 1/* which is 9.3 percent of total employment (civilian employment plus employment in the armed forces).

III. Workers and Staff as an Employment Classification

In the system of employment classification used in North Korea, all persons in the socialized sector who are paid a fixed wage or salary are called workers and staff. This classification, however, does not include members of cooperatives, entrepreneurs, employees of private enterprises, or individual artisans. Workers and staff are primarily non-agricultural. Although employees in state agriculture are included in the classification workers and staff, these employees represented less than 6 percent of the total employment in 1958. The total number of workers and staff increased from 565,000 in 1949 to 1,010,000 in 1958, an annual average rate of growth of 6.7 percent.

* For serially numbered source references, see the Appendix.

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Table 1

Estimated Population of North Korea, by Age Group a/
1949 and 1953-58

Million Persons							
Age Group	1949 <u>b/</u>	1953 <u>c/</u>	1954 <u>d/</u>	1955 <u>c/</u>	1956 <u>c/</u>	1957 <u>c/</u>	1958 <u>c/</u>
Total	<u>9.10</u>	<u>7.51</u>	<u>7.70</u>	<u>7.89</u>	<u>8.08</u>	<u>8.28</u>	<u>8.47</u>
0 through 14 years	3.80	3.45	3.48	3.51	3.54	3.58	3.61
15 through 59 years	4.70	3.67	3.82	3.98	4.13	4.29	4.44
60 years or older	0.60	0.39	0.40	0.40	0.41	0.41	0.42

a. Midyear figures.

b. 2/

c. These figures are projections of the total population and its distribution by age in 1954, based on the assumption of a life expectancy at birth of 45 years and of a birthrate of 43 per 1,000.

d. 3/

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Table 2

Estimated Civilian Employment in North Korea
by Branch of the Economy a/
1949 and 1953-58

						Million Persons	
<u>Branch</u>	<u>1949</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>
Total <u>b/</u>	<u>4.16</u>	<u>2.96</u>	<u>3.06</u>	<u>3.15</u>	<u>3.26</u>	<u>3.39</u>	<u>3.52</u>
Agricultural <u>c/</u>	2.93	2.29	2.21	2.15	2.15	2.15	2.10
Nonagricultural <u>d/</u>	1.23	0.67	0.85	1.00	1.11	1.24	1.42
Workers and staff <u>e/</u>	0.55	0.52	0.65	0.71	0.76	0.79	0.95

a. Midyear figures except as indicated.

b. Civilian employment was estimated to be 80 percent of the population 15 years and older minus employment in the armed forces. The data on the population 15 years and older were taken from Table 1, p. 3, above, and the participation rate was derived by analogy with Communist China, where the average participation rate during the Five Year Plan (1953-57) was approximately 80 percent. 4/ Employment in the armed forces was taken from source 5/.

c. From Table 6, p. 8, below.

d. Residual (civilian employment minus agricultural employment).

e. Annual average figures, excluding workers and staff employed in state agriculture. See Table 3, p. 5, below.

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Table 3

Estimated Number of Workers and Staff in North Korea
by Type of Establishment and Branch a/
1949 and 1953-58

	Thousand Persons						
Type of Establishment and Branch	1949 <u>b/</u>	1953 <u>b/</u>	1954 <u>b/</u>	1955 <u>b/</u>	1956 <u>b/</u>	1957	1958
Total	<u>565</u>	<u>575</u>	<u>690</u>	<u>763</u>	<u>808</u>	<u>844 c/</u>	<u>1,010 d/</u>
Enterprises	<u>434</u>	<u>404</u>	<u>518</u>	<u>597</u>	<u>636</u>	<u>661 e/</u>	<u>819 f/</u>
Industry	245	164	216	262	293	322 <u>g/</u>	422 <u>f/</u>
Construction	82	91	132	150	145	142 <u>h/</u>	164 <u>f/</u>
Agriculture	17	56	45	50	53	53 <u>h/</u>	60 <u>i/</u>
Transport and communications	65	62	69	72	69	68 <u>h/</u>	76 <u>i/</u>
Commerce	25	17	27	32	36	36 <u>h/</u>	52 <u>f/</u>
Other	0	14	29	31	40	40 <u>h/</u>	45 <u>i/</u>
Institutions	<u>131</u>	<u>171</u>	<u>172</u>	<u>166</u>	<u>172</u>	<u>183 j/</u>	<u>191 j/</u>

a. Average annual figures.

b. 6/

c. 7/

d. Estimated on the basis of official statements of the level of employment in the first 6 months of 1958 and the first 6 months of 1959. 8/

e. The sum of employment in 1956 and the officially announced increment for 1956-57. 9/

f. The sum of employment in 1957 and the increase for 1958 as derived from official announcements. 10/

g. The sum of industrial employment in 1956 and the officially announced increment for 1956-57. 11/

h. Employment in the remaining categories is the residual. Estimates of the employment in each of these categories are derived by dividing this residual among the categories in the same proportions as in 1956.

i. Employment in the remaining categories is the residual. Estimates of the employment in each of these categories are derived by dividing this residual among the categories in the same proportion as in 1957.

j. Residual (total employment minus employment in enterprises).

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Table 4

Estimated Employment in State and Cooperative Industry in North Korea
by Sector a/
1949 and 1953-58

						Thousand Persons	
<u>Sector</u>	<u>1949</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>
Total	<u>276</u>	<u>198</u>	<u>246</u>	<u>302</u>	<u>347</u>	<u>410</u>	<u>542</u>
State <u>b/</u>	245	164	216	262	293	322	422
Cooperative <u>c/</u>	31	34	30	40	54	88	120

a. Average annual figures.

b. From Table 3, p. 5, above.

c. The sum of employment in production and fishery cooperatives. Data on production cooperatives for 1949 and 1953-56 are from source 12/ and for 1957-58 are derived from an official index. 13/ Data on fishery cooperatives for 1949 are from source 14/, for 1953-56 are derived from an official index 15/ on the assumption that the rate of increase for 1956-57 was the same as the average annual rate for 1953-56, for 1957 are derived from the officially announced figure for 1949 and the percentage increase for 1949-57, 16/ and for 1958 are estimated on the basis of the average annual rate of increase for 1953-56.

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Table 5

Estimated Employment in State and Cooperative Industry in North Korea
by Type of Industry a/
1949 and 1953-58

	Thousand Persons						
Type of Industry	<u>1949</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>
Total <u>b/</u>	<u>276</u>	<u>198</u>	<u>246</u>	<u>302</u>	<u>347</u>	<u>410</u>	<u>542</u>
Heavy <u>c/</u>	188	90	136	178	212	253	334
Light <u>c/</u>	88	108	110	124	135	157	208

a. Annual average figures.

b. From Table 4, p. 6, above.

c. Estimated on the basis of official statements concerning the relative shares of heavy and light industry in the total industrial output in North Korea and by analogy with Communist China. It is assumed that the relative productivity of these two sectors of industry is the same in both countries. 17/

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Table 6

Estimated Agricultural Employment in North Korea, by Sector a/
1949 and 1953-58

Million Persons							
Sector	1949	1953	1954	1955	1956	1957	1958
Total	2.93	2.29	2.21	2.15	2.15	2.15	2.10
Socialized	0.02	0.06	0.08	0.99	1.53	1.91	2.10
State b/	0.02	0.06	0.04	0.05	0.05	0.05	0.06
Cooperative c/	0	d/	0.04	0.94	1.48	1.86	2.04
Private c/	2.91	2.23	2.13	1.16	0.62	0.24	0

a. Midyear figures except as noted.

b. Annual average figures, from Table 3, p. 5, above.

c. Estimated on the basis of analogy with Communist China and from official statements concerning the number of agricultural households in cooperatives, the percentage of agricultural households in cooperatives, the percentage of the population dependent on cooperative agriculture for a living, and the percentage of the population dependent on private agriculture for a living. 18/

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APPENDIX

SOURCE REFERENCES

Evaluations, following the classification entry and designated "Eval.," have the following significance:

<u>Source of Information</u>	<u>Information</u>
Doc. - Documentary	1 - Confirmed by other sources
A.- Completely reliable	2 - Probably true
B - Usually reliable	3 - Possibly true
C - Fairly reliable	4 - Doubtful
D - Not usually reliable	5 - Probably false
E - Not reliable	6 - Cannot be judged
F - Cannot be judged	

"Documentary" refers to original documents of foreign governments and organizations; copies or translations of such documents by a staff officer; or information extracted from such documents by a staff officer, all of which may carry the field evaluation "Documentary."

Evaluations not otherwise designated are those appearing on the cited document; those designated "RR" are by the author of this research aid. No "RR" evaluation is given when the author agrees with the evaluation on the cited document.

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- 25X1A 1. [REDACTED]
2. Taeuber, Irene B. "Korea and the Koreans in the Northeast Asia Region," Population Index, Oct 50. U. Eval. RR 2. CIA. CIA/RR IM-396, Population and Manpower of Korea, 13 Sep 54. C.
3. CIA. CIA/RR IM-396 (2, above).
4. CIA. CIA/RR RA 59-12, Labor Supply and Employment in Communist China, 1952-58, Aug 59. S.
25X1A 5. [REDACTED]

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